



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,552	02/20/2004	Joseph F. Hicklin	MWS-111RCE	7454
74321 7590 05/20/2009 LAHIVE & COCKFIELD, LLP/THE MATHWORKS FLOOR 30, SUITE 3000 One Post Office Square Boston, MA 02109-2127				
EXAMINER				
SKOWRONEK, KARL HEINZ R				
ART UNIT		PAPER NUMBER		
1631				
MAIL DATE		DELIVERY MODE		
05/20/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

<b>Application No.</b> 10/783,552	<b>Applicant(s)</b> HICKLIN ET AL.
<b>Examiner</b> KARLHEINZ R. SKOWRONEK	<b>Art Unit</b> 1631

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 04 May 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.  
NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-5, 8-11, 14-17, 20-23, 26-29, 32-35 and 37-39.  
Claim(s) withdrawn from consideration: 6-7, 12-13, 18-29, 24-25, 30-31, and 36.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Marjorie Moran/  
Supervisory Patent Examiner, Art Unit 1631

Continuation of 11. does NOT place the application in condition for allowance because: Applicants arguments have been considered. Applicant argues with respect to the rejection of claims 1-5, 8-11, 14-17, 20-23, 26-29, and 32-35, the combination of references, Sauro in view of Kurata, do not show a tabular view being a representation of at least a portion of the model that is adapted to receive input and commands from a user. The argument is not persuasive. First, Sauro states the depiction in figure 12 illustrates the interaction between Metatool and Jdesigner, where Jdesigner acts as the model editor from which users can initiate simulation and Metatool analysis. Sauro refers to the lower portion of figure 12 as the Metatool interface. Giving the term "interface" its ordinary meaning of "a place at which independent and often unrelated systems meet and act on or communicate with each other" ("interface", Merriam-Webster Online Dictionary, 2009), Sauro suggests that the screen shot of figure 12 is adapted to accept user commands. An interpretation that is consistent within scope of the ordinary meaning of the term "interface". Contrary to the teaching in Sauro, applicant asserts nowhere does Sauro disclose or suggest the lower portion of figure 12 a representation of at least a portion of the model. Sauro discloses, "Note that one of the elementary modes in the lower panel is highlighted. The main canvas shows the Calvin reaction network, and the selected elementary mode is displayed on the reaction network by highlighting the appropriate reactions." Thus, a table representing at least a portion of the model is displayed. Second, Kurata shows a tabular data editor in figure 3, which shows a tabular view being a representation of at least a portion of the model that is adapted to receive input and commands from a user.

Applicants argue that teaches away from modification of the framework. This is not persuasive. Nowhere in Kurata is it stated that a new framework is required or the term "framework" used. Kurata recognized a deficiency in the field of systems biology in accurately representing signal transduction pathways. Kurata addressed the deficiency by developing a visually and accurately described nomenclature for signal transduction pathways and providing new algorithms to mathematically model signal transduction pathways called regulator reaction equations. Sauro, on the other hand, presents a framework to facilitate the interchange of files between software modules that perform distinct algorithms, called SBW or Systems Biology Workbench. Sauro shows that a benefit of the SBW is that the SBW framework does not constrain developers to a single platform or even a single language (p. 370). Sauro suggests this means developers can focus on developing functionalities and algorithms. Sauro et al shows that in the future new software modules will developed. Sauro shows a variant of eXtensible Markup Language (XML) called Systems Biology Markup Language (SBML). Kurata shows that an XML based representation provides dynamic extensibility and configurability, where components and reactions can be easily added, removed or exchanged among different databases. Kurata shows a further advantage of CADLIVE software module providing the capability of importing or exporting various models and features a high compatibility among pathway databases (p. 4084, col. 2). Sauro is suggesting the SBW should be modified with new software modules and algorithms to bring novel functionality to the SBW, contrary to applicant's assertion.

With respect to the rejection of claims 37 and 39, applicant argues that Sauro in view of Kurata in view of Shannon and in view of biospace fail to show a tabular view being a representation of at least a portion of the model that is adapted to receive input and commands from a user. The argument is not persuasive. Sauro in view of Kurata shows the recited limitation. Shannon also shows at least a tabular view adapted to receive input from a user in figures 1 and 5. The rejection is maintained.